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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SOKICHI NOSAKA and TAKASHI HAMADA

Appeal 2009-003104
Application 09/772,137
Technology Center 3600

Decided: November 23, 2009

Before: WILLIAM F. PATE III, LINDA E. HORNER and
STEVEN D.A. MCCARTHY, *Administrative Patent Judges*.

HORNER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Sokichi Nosaka et al. (Appellants) seek our review under 35 U.S.C. § 134 of the Examiner's decision twice rejecting claims 1, 4-7, 9-20, and 38-41. Claims 2, 3, 8, 36, and 37 are cancelled, and claims 21-35 are withdrawn.¹ We have jurisdiction under 35 U.S.C. § 6(b) (2002).

SUMMARY OF DECISION

We AFFIRM-IN-PART.

THE INVENTION

Appellants' claimed invention is a method of providing a mark on at least one of the exposed, laterally-spaced side surfaces of a power transmission belt. Spec. 4:2-4. Claims 1, 40, and 41, reproduced below, are representative of the subject matter on appeal.

1. A method of providing a mark on a power transmission belt having a body with a length and exposed laterally spaced side surfaces, including portions to engage a cooperating pulley, said method comprising the step of:

forming a mark directly on the at least one laterally spaced side surface by inscribing the at least one laterally spaced side surface to a depth of 0.1 to 1 mm and so that at least a part of the mark is formed directly on at least one of the portions of at least one of the laterally spaced side surfaces.

¹ The Examiner's Answer mistakenly lists claim 8 as rejected. Ans. 4. Appellants' Reply Brief mistakenly lists claims 21-28 as appealed. See claims filed March 7, 2005.

40. A method of providing a mark on a power transmission belt having a body with a length and exposed laterally spaced side surfaces, said method comprising the steps of:

altering at least one of the laterally spaced side surfaces by forming a mark directly on the at least one laterally spaced side surface,

wherein the step of forming a mark on the at least one laterally spaced side surface comprises inscribing the mark on the at least one laterally spaced side surface,

wherein the mark is inscribed to a depth of 0.1 to 1 mm,

wherein the mark is inscribed with a laser beam,

wherein the laser beam forms a depression in the at least one of the laterally spaced side surfaces; and

directing a material into the depression, which material contrasts with the at least one laterally spaced side surface.

41. A method of providing a mark on a power transmission belt having a body with a length, exposed laterally spaced side surfaces, a cushion rubber layer within which at least one load carrying member is embedded, and a tension layer, said method comprising the step of:

altering at least one of the laterally spaced side surfaces by forming an informational mark directly on the at least one laterally spaced side surface by an inscribing process to a depth of 0.1 to 1 mm so that at least a part of the mark is formed on the at least one laterally spaced side surface in the tension layer and on the at least one load carrying member at the at least one laterally spaced side surface.

THE EVIDENCE

The Examiner relies upon the following evidence:

Matsumoto	US 6,103,349	Aug. 15, 2000
Toshiaki ²	JP 10-252833	Sep. 22, 1998

THE REJECTION

Appellants seek review of the Examiner's rejection of claims 1, 4-7, 9-20, and 38-41 under 35 U.S.C. § 103(a) as unpatentable over Matsumoto and Toshiaki.³

ISSUES

The Examiner determined that claims 1 and 38 are unpatentable in view of Matsumoto and Toshiaki based in part on the finding that Matsumoto discloses marking on the laterally-spaced side surface of a power transmission belt. Ans. 4, 7.

Appellants argue that Matsumoto discloses forming a mark on the surfaces of a power transmission belt that do not engage a cooperating

² The Answer refers to Toshiaki as "JP (10-252833)," "JP ('833)," and "applicant's prior art." See e.g., Ans. 4-8. We refer to this reference as "Toshiaki" throughout. All references to Toshiaki refer to the English-language translation provided by the Examiner on September 13, 2005.

³ The Answer rejects claims 1, 4-7, and 9-20 over Toshiaki in view of Matsumoto, and claims 38-41 over Matsumoto in view of Toshiaki. Ans. 4-8. We treat the rejections together as this is merely a matter of exposition. *In re Bush*, 296 F.2d 491, 496 (CCPA 1961) ("where a rejection is predicated on two references each containing pertinent disclosure which has been pointed out to the applicant, we deem it to be of no significance, but merely a matter of exposition, that the rejection is stated to be on A in view of B instead of on B in view of A, or to term one reference primary and the other secondary.")

pulley, while in contrast, claims 1 and 38 require at least a part of the mark be formed on the portion of the laterally-spaced side surface that engages a cooperating pulley. App. Br. 6-7, 13-14.

The issue before us is:

Have Appellants shown the Examiner erred in finding that Matsumoto discloses forming a mark on the portion of the laterally-spaced side surface of a power transmission belt that engages a cooperating pulley, as called for in claims 1 and 38?

The Examiner concluded claim 40 is unpatentable over Matsumoto and Toshiaki. Ans. 6. Appellants contend the Examiner erred because the lasing of a fabric layer on a back surface of a power transmission belt as disclosed in Toshiaki “would not motivate one skilled in this art to lase a side surface of a belt [as recited in claim 40] that has potentially several different compositions and components.” App. Br. 14-15.

The issue before us is:

Have Appellants shown the Examiner erred in determining that the combined teachings of Matsumoto and Toshiaki would have led one having ordinary skill in the art to modify Toshiaki to form a mark on the laterally-spaced side surface of the belt, as called for in claim 40?

The Examiner concluded claim 41 is unpatentable over Matsumoto and Toshiaki. Ans. 7. Appellants argue that Matsumoto does not teach or suggest any alteration of a belt side surface through inscription. App. Br. 10.

The issue before us is:

Have Appellants shown that the Examiner erred in concluding the subject matter of claim 41 would have been obvious in view of Matsumoto and Toshiaki?

FINDINGS OF FACT

We find that the following enumerated facts are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

1. Matsumoto discloses placement of a mark on the surface of a power transmission belt for indicating the history of manufacturing of the belt so that the mark is visible for a long time. Matsumoto, col. 1, ll. 4-10, 57-65. Matsumoto consistently describes that the mark is not placed on a surface of the belt in contact with a pulley, but rather on a surface of the belt that is not in contact with a pulley, so that contact or friction will not render the mark unrecognizable. See, e.g., Matsumoto, col. 1, l. 66 to col. 2, l. 6; col. 2, ll. 15-25; figs. 1-7.
2. Appellants admit that “[c]laim 40 does not require that the mark, or any part thereof, be provided on pulley contacting side surface portions.” App. Br. 15.
3. Appellants’ Specification discloses a belt 70 with a body 72 made of rubber, embedded with load carrying cords 76. Spec. 13:10-13; fig. 4. The portion of each laterally-spaced side surface 82, 84 of the belt 70 between the cords 76 and the outside 80 is the same composition as the outside of the belt 80, namely, rubber. Spec. 13:13-15; fig. 4.
4. Appellants admit that “claim 41 does not require the formation of any part of the mark on a side surface portion that engages a cooperating pulley.” App. Br. 11.

PRINCIPLES OF LAW

Appellant has the burden on appeal to the Board to demonstrate error in the Examiner's position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) ("On appeal to the Board, an applicant can overcome a rejection [under § 103] by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness.") (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998)).

"Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). *See also KSR*, 550 U.S. at 407 ("While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.")

ANALYSIS

Claims 1-20, 38, and 39

Independent claims 1 and 38 are method claims that require forming a mark on the exposed, laterally-spaced side surface of a power transmission

belt so that at least a part of the mark is formed on the portion of the side surface that engages a cooperating pulley.

While the Examiner's finding is correct that Matsumoto discloses forming a mark on the exposed, laterally-spaced side surface of a power transmission belt (Fact 1), claims 1 and 38 require that the mark be formed, at least in part, on the portion of the side surface that engages a cooperating pulley. Matsumoto expressly discloses forming the mark only on portions of the belt that do not contact a pulley (Fact 1). As such, the Examiner's finding that Matsumoto discloses forming a mark, at least in part, on the exposed, laterally-spaced side surface of a power transmission belt is in error.

Appellants have demonstrated that the Examiner's conclusion of obviousness for claims 1 and 38 as being unpatentable over Matsumoto and Toshiaki is based on an erroneous underlying finding of fact. Claims 2-20 and 39 must also be reversed by virtue of their dependence, directly or indirectly, from claims 1 and 38.

Claim 40

In contrast to independent claims 1 and 38, independent claim 40 requires the mark be formed only on the exposed, laterally-spaced side surface and is not further limited to require the mark to extend to a portion of the side surface that engages a cooperating pulley (Fact 2).

We are unpersuaded by Appellants' argument that lasing of a fabric layer on the back surface of a power transmission belt as disclosed in Toshiaki "would not motivate one skilled in this art to lase a side surface of a belt that has potentially several different compositions and components." See App. Br. 15.

First, Appellants' contention is not supported by the claim. Claim 40 does not limit the placement of the mark to a specific portion of the laterally-spaced side surface of the belt; rather, the claim provides that the mark could be placed on any portion of the side surface of the belt. Therefore, providing a mark on a portion of the side surface of the belt with the same composition as the back of the belt would meet the limitation of claim 40 in question and avoid any difficulties associated with a different composition and components. Appellants' own disclosure provides an example of such a belt, depicting an embodiment with a portion of the lateral side surface that has the same composition as the back of the belt (Fact 3).

Second, Appellants have the burden to demonstrate error in the Examiner's position. Appellants have asserted that the back of the belt and the side of the belt may have different composition and components, but Appellants have provided no explanation as to how those differences would prevent marking the laterally-spaced sides of the belt, or otherwise be detrimental, so that a person of ordinary skill in the art would not consider such a modification. Further, the Examiner concluded it would have been obvious to a person of ordinary skill in the art to modify the references as proposed "in order to properly identify the belt history and keep the mark recognizable for a long time," and Appellants' argument fails to directly address this rationale. Ans. 6. Therefore, Appellants have failed to prove that the Examiner erred in the rejection of claim 40.

Appellants' Brief contains two other arguments worthy of brief mention.⁴ First, Appellants argue that Matsumoto does not disclose the step

⁴ We note these arguments were written before the new grounds of rejection in the Examiner's Answer.

of adding contrasting material to the depression formed by the laser; however, the Examiner found that Toshiaki, rather than Matsumoto, discloses this step. See App. Br. 15 (incorporating the argument used against the rejection of claim 9 at App. Br. 9-10, and incorporating the argument used against the rejection of claim 38 at App. Br. 13-14); Ans. 6. Second, Appellants argue that Toshiaki does not teach alteration of the belt side surface; however, the Examiner found that Matsumoto, rather than Toshiaki discloses this step. See App. Br. 15 (incorporating the argument used against the rejection of claim 38 at App. Br. 13-14); Ans. 6. Thus, Appellants' arguments do not address the proposed rejection, and do not convince us of error by the Examiner in the rejection of claim 40.

Claim 41

Independent claim 41, like claim 40, requires the mark be formed only on the exposed, laterally-spaced side surface of the power transmission belt and is not further limited to require the mark to extend to a portion of the side surface that engages a cooperating pulley (Fact 4).

Appellants' argue that Matsumoto does not teach or suggest any alteration of a belt side surface through inscription; however, the Examiner found that Toshiaki discloses inscription and Matsumoto discloses the location of the inscription. App. Br. 10; Ans. 7. Thus, Appellants' argument is an individual attack, and does not convince us of error by the Examiner in the rejection of claim 41. See *In re Merck & Co.*, 800 F.2d 1091, 1097; *In re Keller*, 642 F.2d 413, 426 (CCPA 1981) (Fed. Cir. 1986) (One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references).

CONCLUSIONS

Appellants have shown that the Examiner erred in finding that Matsumoto discloses forming a mark on the portion of the laterally-spaced side surface of a power transmission belt that engages a cooperating pulley.

Appellants have failed to show that the Examiner erred in finding that the combined teachings of Matsumoto and Toshiaki would have led one having ordinary skill in the art to modify the location of Toshiaki's mark from the back surface of a power transmission belt to the laterally-spaced side surface of the belt, as called for in claim 40.

Appellants have failed to show that the Examiner erred in concluding the subject matter of claim 41 would have been obvious in view of Matsumoto and Toshiaki.

DECISION

We REVERSE the decision of the Examiner to reject claims 1-20, 38, 39.

We AFFIRM the decision of the Examiner to reject claims 40 and 41.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED-IN-PART

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Appeal 2009-003104
Application 09/772,137

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